



**Detailed Drilling Data Reporting, Procedures, and
Document Submission Requirements**

Table of Contents

Introduction

- Step 1: E-submission Authorization (unless already so authorized)
- Step 2: Spud Report or Resumed Report (Status Update)
- Step 3: Tuesday Midnight Update (Weekly Update)
- Step 4: Kick Reporting (if applicable)
- Step 5: Rig Release Report or Drilling Suspended Report (Status Update)
- Step 6: End of Well Report
- Step 7: Charlie Lake Core Storage Facility Submission Requirements (MEMPR)
- Step 8: Hardcopy Data Submission (MEMPR, Victoria, and OGC Fort St. John)
- Step 9: Miscellaneous Procedures (“Application to Alter a Well – Re-entries,” “ Application to Amend a Well Authorization,” Logging and Sample waivers, and advice concerning casing or abandonment cementing, hole problems, and variances from regulations.)
- Step 10: Compliance

Contact List

Agreement

Detailed Drilling Data Reporting, Procedures, and Document Submission Requirements

Introduction:

- **Attention:** Oil Company Drilling, Operations Geology and Completions Departments and, Drilling Consulting Firms involved in drilling operations or re-entries.
- **Applicable for:** New drills (test holes and coalbed gas wells included), suspensions and resumptions of drilling operations and re-entries, using drilling and service rigs, and coiled tubing units.
- **OGC Website:** Select “Application Forms” then “Operations Engineering”, enter, then scroll down in “drilling”, refer to “End of Well-Detailed Well Drilling Reporting Requirements”, and “End of Well Report”. Also therein are other forms mentioned in this document.

Step 1: E-submission Authorization (unless already so authorized)

- Approximately 2 weeks prior to expected spud or resumption of drilling (or re-entry) of a well in BC, please go the OGC website:
- www.ogc.gov.bc.ca , Our Duty, Operations Engineering, Online Drilling Reporting, Information Letter 04-34 and follow the instructions. Fax to (250) 261 – 2050, Attention: Administrative Assistant or Drilling and Production Technician, who will then e-mail your user ID and password for access to the Online Drilling Reporting system.
- The Information Letter 04-34 requests that Drilling Managers or their company designate are to provide the OGC with a letter identifying the primary and secondary designate for the company drill reporting. You may have more than 2 contacts.
- The Information Letter 04-34 must contain the primary and secondary contact designation, name, title, address, telephone number, fax number, cell number and e-mail address. Consulting firms will also require this letter from each company it reports for.
- THIS MUST BE IN PLACE PRIOR TO SPUD.
- IMPORTANT: The list of authorized drilling contacts should be kept up to date because it is not desirable to have a person that has left your company having access and information to the wells you are drilling.

Step 2: Spud Report or Resumed Report (Status Update)

- Web page is www.ogc.gov.bc.ca. Please access the online drilling reporting system as per the instructions received from the Administrative Assistant or the Drilling and Production Technician.
- Locate the well you have spudded and enter rig and spud date according to the instructions thereon. If the rig is new to the province and not in the reporting system, call or e-mail the Administrative Assistant or the Drilling and Production Technician and ask them to enter it. Thereafter, you should be able to enter the data.
- For Re-entries, the approved Application to Alter a Well – Re-entries will specify the event which will be deemed as spud.
- For resumptions of drilling (after a previous suspension of drilling) enter resumed date as you would for a spud. Resumed date and time will in most cases be at the start of making new hole under a float or guide shoe.

Step 3: Tuesday Midnight Update (Weekly Update)

- Access the on-line drilling reporting system as per the instructions referred to in Step 2, and for each rig (or well) you have reported as spudded or resumed, on each Wednesday morning enter the status update, as at Tuesday midnight – approximate depth is OK.
- For any rig that has rig released before Tuesday midnight and is reasonably expected to spud a well in the next week enter its status update as Prep to Spud (Prep to resume, if resuming expected).
- **PLEASE NOTE THAT “PREP TO SPUD” IS ONLY VALID AS AT TUESDAY MIDNIGHT AND ONLY IF THE RIG IS NOT DRILLING ON A WELL AND IS REASONABLY EXPECTED TO SPUD IN THE NEXT 7 DAYS. IE BEFORE THE NEXT TUESDAY MIDNIGHT WEEKLY UPDATE.**
- Similarly, for any rig that has been racked or a rig that is coming into the province AND in both cases the rigs are expected to spud (or resume) in the next week enter Prep to Spud (or Prep to Resume) for the relevant approved well.
- If you have reported a rig as “Prep to Spud” as of Tuesday midnight, and by the next Tuesday midnight the rig has still not spudded, please re-update the rig as “Prep to Spud”, or if the destination of the rig has changed, enter “Spud Postponed” for the “first” well and enter “Prep to Spud” for the “second” well as at Tuesday midnight status.

Step 4: Kick Reporting (if applicable)

- Please report all kicks ASAP by completing the top section, last casing string set and kick data on the End of Well Report form, and fax to (250) 261 – 2050. If, in circulating out the kick the well control situation is deteriorating, please call the OGC Drilling Engineer, Technical Advisor or Drilling and Production Technician or on weekends at (250) 261 – 5700.
- Submit from well site or head office.

Step 5: Rig Release Report or Drilling Suspended Report (Status Update)

- Within 24 business hours after rig release or drilling suspended, access the On-line Drilling reporting system as per the instructions referred to in Step 2, locate the well that has rig released or drilling suspended and enter the Rig Release date and expected rig destination. If the rig destination is not known, so state rather than guessing.
- Drilling SUSPENDED is applicable when a rig is released but the drilling of the well is not finished (as per the Well Authorization) AND drilling is reasonably expected to resume within a year of rig release. Example of this could be:
 - Switch out rigs for HZ underbalanced drill
 - Release drilling rig, switch to service rig to penetrate pay with air (both considered drilling operations).
 - “Chased out” by breakup, will resume drilling next freeze up.

Step 6: End of Well Report

- Designate a person and a back up individual for preparation and submission of this report. Need phone and cell numbers, please (Attached agreement form).
- Within 2 business days of rig release or drilling suspended (i.e. when rig is to move or shut down for a period of time) report must be submitted to the OGC Drilling Engineer, preferably by e-mail
- Report must be completely and accurately filled out.

- Submit Part A, Part B (if applicable), a list of formation tops as picked from logs, (or MWD-Gr log if no open hole logs), or picked from samples if no open hole or MWD-Gr logs. Need BOTH Measured Depth AND TRUE vertical depth, if directional. Also need list of Logs run (including MWD-Gr) as per the following instructions:

- On the List of Formation tops, please add written list of logs run with the following information:
 - Log type run (include MWD – GR, if run) Please write log type out in full – i.e. Borehole Compensated Sonic, not BHC
 - Run #
 - Last date run for each run # (finished date)
 - Intervals logged (i.e. top depth and bottom depth) for each log.
 - Need for both MD and TVD, if applicable
 - BHT (bottom hole temperature), include with the written list of logs run

- **USE THE FORMAT SHOWN BELOW, FOR EACH LOG YOU HAVE THEN YOU NEED TO ENTER ONE LINE OF INFORMATION:**

| Log Type (Name) | Run # | Run End Date | Top Depth (MD) | Bottom Depth (MD) | Top Depth (TVD) | Bottom Depth (TVD) | BHT |
|-----------------|-------|--------------|----------------|-------------------|-----------------|--------------------|-----|
| | | | | | | | |
| | | | | | | | |

- For wells that have experienced drilling problems that are not evident from the End of Well Report, please provide a brief point summary to explain – i.e.: drilled to 800m, lost fish in hole, fish bottom at 750m, fish top at 600m, brief description of fish, address issue of potential interzonal communication, then set plug #1, kicked off plug at depth of to drill around fish.

- For re-entries, please also provide a brief point summary of the program if not evident from the End of Well Report. i.e.: for a basic perforation and evaluation of a zone in a cased well; started drilling on surface 3m cement abandonment plug at 08:00 hr 97-06-15, perforated Bluesky interval 900 – 905m, gas rate 40 E3M3, fractured, gas rate 50 E3M3/d, released rig after running tubing.

- Definition of Re-entry
 - Any well that is currently abandoned (no wellhead) and that is proposed to be re-entered for ANY reason (i.e.: perforate cased zone, deepen or mill window and drill horizontal) or;
 - Any existing well (with wellhead) on which drilling is to occur (deepening or horizontal).

- Common “Problems” on End of Well Report Submissions
 - Spud and Rig Release (and Resumed or Drilling Suspended) dates entered on E-submission must be the same as those shown on the End of Well Report!!
 - Well NAME i.e. Texaco Porousfield
 - Surface location, NOT bottom hole location (in BC).
 - KB, NOT KB to ground
 - Where is rig going after release? FULL official WELL NAME and LOCATION, please!
 - Surveys: to give a rough idea of well path: i.e. for “S” curve, Survey #1 at/near surface casing shoe, #2 just after KOP (say at 7°), #3 at max build angle, #4 near FTD
 - One cement blend per interval, i.e. 2 separate intervals specified for lead and tail cements on production casing. Also do not need to list cement additives.
 - Need estimated top of cement if cement not at surface when so designed.
 - Must have VO information on closed chamber DST’s – need closed chamber report for the information.
 - Openhole sidetrack: when sidetracking WITHOUT a cement plug only. (i.e. 2nd HZ leg)
 - Kickoff plugs: when sidetracking off a cement plug. DO NOT REPORT also as an openhole sidetrack.
 - PLEASE check off ALL Yes/No boxes!
 - Submit End of Well Report, formation tops list and logs run list in ONE –email please! NOT in bits and pieces.

Step 7: Charlie Lake Core Storage Facility Submission Requirements (MEMPR)

- Telephone: (250) 262 – 3309, Fax: (250) 262 – 3316
- Physical Address: Dave Johnson Building, Mile 52 ½, Alaska Highway

- Mailing Address: Ministry of Energy, Mine and Petroleum Resources, PO Box 281, Charlie Lake, BC V0C 1H0, Attention: Facility Supervisor
- ASAP after well drilled, please submit the following listed below:
- Samples:
 - 2 sets of vials, washed and dried cuttings, clearly marked and in trays. (Information Letter EMD98-11). Include filled out “Notice of Shipment of Drill Cuttings” form.
 - During business hours: to Dave Johnson Building, please ring buzzer inside front door, if no response, go around to back (fenced area).
 - After business hours: to Dave Johnson Building, place sample trays in BLUE drop off box near the front door.
- Cores:
 - Submit during business hours ASAP after well cored to Dave Johnson Building.
 - Submit cores in 32” x 10” x 4” wooden boxes securely nailed shut accompanied by filled out “Notice of Shipment of Cores” form.
 - If NOT submitting cores directly to MEMPR after coring (i.e.: sending them to a facility for analysis directly from the wellsite), submit a completed “Core Removal Application”.

Step 8: Hardcopy Data Submission (MEMPR, Victoria)

- By Mail: Ministry of Energy, Mines and Petroleum Resources, Titles Division, PO Box 9326, Station ‘Prov Govt’, Victoria, BC, V8W 9N3, Attention: Data Centre Supervisor
- By Courier: Ministry of Energy, Mines and Petroleum Resources, Titles Division, 6 Floor, 1810 Blanshard Street, Victoria, BC, V8T 4J1, Attention: Data Centre Supervisor
- Or by E-mail, if possible.
- As soon as possible after well drilled, please submit:
 - Tour sheets and trip sheets

- Directional Surveys (ALSO need 1 copy of Directional Survey to OGC office Fort St. John). Mail: 200, 10003 – 110 Avenue, Fort St. John, BC, V1J 6M7. Fax: (250) 261 – 2050. Or by e-mail. Attention: Operations Engineering Technician)
- Logs: 1 copy, LAS on CD, PDS optional but appreciated. Also submit graphic logs such as the Borehole Imager. If logs require correction, please submit corrected copies when available.
- Copy of core reports AND CORE PHOTOS Please! (conventional and sidewall)
- Copies of DST and Closed Chamber reports if applicable (conventional and wireline DST's)
- Geological reports (EO and EW wells)

Step 9: Miscellaneous Procedures

- “Application to Alter a Well – Re-entries”: required when re-entering a well. Definition of Re-entry in Step 6 hereon. Requirements stated thereon and approved form will stipulate which operations will be deemed as spud – note that the OGC handles a re-entry as a drilling well. Also will require an “Application for Flaring Approval” if flaring is expected during re-entry operations, or any drilling operations where flaring is anticipated (underbalanced, or air). **PLEASE READ AND FOLLOW APPROVAL CONDITIONS!**
- “Application to Amend a Well Authorization” is required when:
 - Changing surface coordinates
 - Changing bottom hole location
 - Changing objective formation
 - Change in drilling mud
 - Change in expected H₂S content
 - Adding another HZ leg
 - Significant changes in casing program (i.e. addition or deletion of intermediate)
 - Change in objective fluid (for spacing reasons)

- NOT required for minor changes in proposed FTD resulting from geological prognosis change, simple changes to hole size and casing size or addition of a core or DST
 - If in doubt as to necessity, please submit.
- Logging and Sample Waivers
 - Please make requests during business hours, as much as possible (from Head office or wellsite).
 - Business hours: OGC, Resource Conservation Branch, Victoria, BC. Send an e-mail clearly stating the request and the reasoning for the request (i.e.: hole conditions, etc) to one of the 4 OGC geological personnel on attached contact list.
 - After business hours: OGC 24 hour phone number at Fort St. John, (250) 261 – 5700.
- Intermediate or Production Casing Cementing, Plug – backs and Abandonments
 - In general ensure possibility of interzonal communication and communication to surface is nil.
 - If problems, call OGC Drilling Engineer or Drilling and Production Technician (from Head office or wellsite).
- Hole problems
 - For fish in hole, sloughing hole, well control issues or other hole problems where OGC assistance required, call OGC Drilling Engineer or Drilling and Production Technician. Please also report kicks quickly as mentioned earlier in this document (from Head office or wellsite).
- Variances from regulations
 - Wellsite spacing, BOP configurations and requirements, etc.
 - Please submit proposal via e-mail to OGC Technical Advisor or OGC Drilling Engineer. Include a schematic if it will help clarify the request (from Head office or wellsite).
- Notifications for OGC to attend/witness ERP meetings/pressure tests, etc.
 - Notify Technical Advisor, please give sufficient lead time.

Step 10: Compliance

- This document is intended to clarify drilling reporting instructions and procedures, hence saving time for all concerned.
- It is incumbent on industry to provide timely, complete and accurate drilling information and to follow procedures.
- Frequent violations of these procedures will NOT be tolerated; it costs us all valuable time.
- The oil company will quickly be advised of the situation AND will be asked to do the reporting when the consulting firm continually does not follow requests for compliance.
- A point system has been developed to track compliance in this matter. The “forgetting” of Tuesday midnight (weekly) status updates and incomplete, erroneous, or late End of Well Reports will cost the operator and the consulting firm (if applicable) point at the discretion of the Drilling Engineer.
- If you encounter problems/force majeure in reporting, please advise. DO NOT simply let the matter “slip”.
- Electronic reporting for the End of Well Report is under development, timing of completion is uncertain at this time.
- Your cooperation in this matter will be appreciated!

Contact List (in order of mention in text)

| | | | | |
|-------|--|------------------|------------------|--|
| OGC | Administrative Assistant: Trudy Clark | (250) 261 – 2055 | (250) 261 – 2050 | Trudy.Clark@gov.bc.ca |
| OGC | Drilling and Production Technician: George Guo | (250) 261 – 2051 | (250) 261 – 2050 | George.Guo@gov.bc.ca |
| OGC | Drilling Engineer: Don Buckland | (250) 261 – 5761 | (250) 261 – 2050 | Don.Buckland@gov.bc.ca |
| OGC | Technical Advisor: Bruce Cazes | (250) 261 – 5759 | (250) 261 – 5765 | Bruce.Cazes@gov.bc.ca |
| MEMPR | Facility Supervisor: Ryan Olson | (250) 262 – 3309 | (250) 262 – 3316 | EM.Corelab@gov.bc.ca |
| MEMPR | Data Center Supervisor: Steven Glover | (250) 952 – 0293 | (250) 952 – 0291 | Steven.Glover@gov.bc.ca |
| OGC | Operations Engineering Technician: Jodie Myers | (250) 261 – 5782 | (250) 261 – 2050 | Jodie.Myers@gov.bc.ca |
| OGC | Sr. Petroleum Geologist: June Barker | (250) 952 – 0306 | (250) 952 – 0301 | June.Barker@gov.bc.ca |
| OGC | Supervisor, Reservoir Geologist: Jeff Johnson | (250) 952 – 0355 | (250) 952 – 0301 | Jeff.Johnson@gov.bc.ca |
| OGC | Sr. Petroleum Geologist: Doug McLean | (250) 952 – 0353 | (250) 952 – 0301 | Doug.McLean@gov.bc.ca |
| OGC | Sr. Petroleum Geologist: Dan Walker | (250) 952 – 0357 | (250) 952 – 0301 | Dan.Walker@gov.bc.ca |

AGREEMENT
End of Well Report Submission

We hereby acknowledge that we have read the forgoing document and agree to follow the above procedures.

COMPANY: _____

DATE: _____

Responsible Individual:

Name: _____

Signature: _____

Business Phone #: _____

Cell Phone #: _____

Back up Individual:

Name: _____

Signature: _____

Business Phone #: _____

Cell Phone #: _____

Second Back up (if desired or considered necessary)

Name: _____

Signature: _____

Business Phone #: _____

Cell Phone #: _____

Please E-mail this completed page to the Oil and Gas Commission's , Drilling and Production Technician or Senior Drilling Engineer, or fax to (250) 261 – 2050.